Claims

Transdermal the apeutic system, in particular a patch, comprising

- a redetachable protective layer,
- a pressure-sensitive adhesive reservoir layer and
- a backing layer with or without a coating of pressure-sensitive \adhesive and featuring a unidirectionally, preferably longitudinally, elastic material having an elasticity of at least 20%.
- 2. Transdermal therapeutic system according to Claim 1, wherein the elasticity is less than 150%.
- Transdermal therapeutid system according to Claim 1 or 3. 2, wherein the backing layer projects beyond the reservoir on all sides.
- Transdermal therapeutic system according to one of the 4. preceding claims, wherein a separating layer is arranged between the reservoir layer and the backing layer coated with pressure-sensitive adhesive.
- Transdermal therapeutic system according to one of the 5. preceding claims, wherein the elastic material has an elasticity in the range 20-80%, with particular preference in the range 40-70% most preferably in the range 44-56%.
- Transdermal therapeutic system according to one of the 6. preceding claims, wherein the material of the backing layer is more than 90%, preferably more than 99%, microbially nondegradable.

- 7. Transdermal therapeutic system according to one of the preceding claims, wherein the backing layer is a woven fabric, a nonwoven fabric or a film.
- 8. Transdermal therapeutic system according to one of the preceding claims, wherein the backing layer essentially comprises a material selected from the group consisting of polyethylenes, polypropylenes and polyesters, selected in particular from the polyalkylene terephthalates.
- 9. Transdermal therapeutic system according to Claim 8, wherein the material of the backing layer is a polyterephthalic diester, preferably a polyterephthalic acid diol ester obtainable by the reaction of a starting material selected from ethylene glycol, 1,4-butanediol 1,4-dihydroxymethyl-cyclohexane, terephthalic acid, isophthalic acid, adipic acid, azelaic acid, sebacic acid, dimethyl terephthalate, dimethyl azelate, dimethyl sebacate, bisphenol A diglycidyl ether, n-decane-1,10-dicarboxylic acid, polyethylene glycol and polybutylene glycol.
- 10. Transdermal therapeutic system according to one of the preceding claims, wherein the pressure-sensitive adhesive reservoir layer comprises at least one active substance selected preferably from the group consisting of psychopharmaceuticals, analgesics and hormones.
- 11. Transdermal therapeutic system according to Claim 10, wherein the hormone is oestradiol, the analgesic is buprenorphine and the psychopharmaceutical is a parasympathomimetic.

- 12. Transdermal therapeutic system according to one of the preceding claims, wherein the pressure-sensitive adhesive reservoir layer contains a water-absorbing polymer.
- 13. Transdermal therapeutic system according to Claim 12, wherein the water-absorbing polymer is a polyvinylpyrrolidone, preferably one having a molecular weight in the range from 1×10^3 to 2×10^6 .
- 14. Transdermal therapeutic system according to one of the preceding claims, wherein the side of the backing layer which faces outwards has a marking/control element which is differentiated from the remaining area.
- 15. Transdermal therapeutic system according to Claim 14, where the marking/control element is a coloured marking, preferably in stripe form, or a coloured thread.
- 16. Transdermal therapeutic system according to one of Claims 14 and 15, wherein the marking/control element which has an elasticity in the range from -20% to +20% relative to the elasticity of the remaining portion of the backing layer.
- 17. Transdermal therapeutic system according to one of the previous claims, wherein the backing layer has a water vapour permeability of at least 0.1 g/m 2 /h, preferably from 1 to 20 g/m 2 /h.
- 18. Transdermal therapeutic system according to one of the preceding claims, wherein the areal proportion of

pores having a size of \leq 400 μm^2 is in the range from 10% to 50%.

- 19. Transdermal therapeutic system according to one of the previous claims, wherein the backing layer has a number of warp threads in the range from 300 to 350, preferably in the range from 310 to 330, and/or a number of weft threads in the range from 100 to 140, preferably in the range from 120 to 130, in each case per 10 cm of unextended fabric.
- 20. A process for producing the transdermal therapeutic system according to one of Claims 1 to 19, comprising the steps of
 - in a presupplied strip-like laminate having an optionally pressure-sensitive adhesive, unidirectionally elastic backing layer and a redetachable protective layer, inserting pressure-sensitive adhesive active substance reservoir sections in sequence in the longitudinal direction,
 - separating the backing layer \flat by punching,
 - removing the unwanted cut portion of the backing layer and
 - then separating the protective tayer in the spaces between the active substance reservoir sections.
- 21. Transdermal therapeutic system according to one of Claims 1 to 19 for use as a multi-day plaster, in particular for the treatment of pain or of drug dependency.

